PCT/US 03/18724

A. CLASSII IPC 7	FICATION OF SUBJECT MATTER C10L1/14 C10L10/00		
	o International Patent Classification (IPC) or to both national classification	tion and IPC	
	SEARCHED .	n symbols)	
Minimum do IPC 7	ocumentation searched (classification system tollowed by classification C10L	cymodaj	
Documentat	tion searched other than minimum documentation to the extent that su	ich documents are included in the fields sea	arched
Electronic d	ata base consulted during the international search (name of data bas	e and, where practical, search terms used)	
EPO-In		,, ,	
FI 0-11	CCI 11Q I		
	ENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the rele	vant nassanes	Relevant to claim No.
Category °	Citation of document, with indication, where appropriate, of the rele	rum passages	, icigvain to Claim NO.
X	WO 99/25793 A (BP OIL INT ; TAYLO	R SPENCER	1,3,4,
^	EDWIN (GB)) 27 May 1999 (1999-05-		9-14
	cited in the application		
	page 8, line 1 - page 10, line 10		
X	WO 01/079397 A (INFINEUM INTERNAT	LTD:	1,3,4,
	FAVA CARLO (GB); JACKSON GRAHAM (9-11,15,
	25 October 2001 (2001-10-25)		17,21,22
	page 12, line 20 - page 13, line	2; claims	
	1-4,8-13 page 20, line 1 - line 11		
	page 20, Time 1 - Time 11 page 28, line 24 - page 29, line	10	•
V			1 2 0
X	US 5 821 202 A (MALIK BHARAT B E 13 October 1998 (1998-10-13)	I AL)	1,2,8, 10,12,13
	cited in the application		~~, *L, ! ~
!	column 11, line 20 - column 12, l	ine 60;	
	claims 13,23,27		
		./	
		Potent femily members are listed.	in anney
	her documents are listed in the continuation of box C.	Patent family members are tisted	
° Special ca	ategories of cited documents:	"T" later document published after the inter or priority date and not in conflict with	rnational filing date
	ent defining the general state of the art which is not dered to be of particular relevance	cited to understand the principle or the invention	
	document but published on or after the international	"X" document of particular relevance; the cl	
L docume	ent which may throw doubts on priority claim(s) or	cannot be considered novel or cannot involve an inventive step when the doc	cument is taken alone
citatio	n or other special reason (as specified)	"Y" document of particular relevance; the cl cannot be considered to involve an Inv document is combined with one or mo	ventive step when the
other	ent referring to an oral disclosure, use, exhibition or means	document is combined with one or mo ments, such combination being obviou in the art.	
	ent published prior to the international filing date but han the priority date claimed	*&* document member of the same patent i	lamily
Date of the	actual completion of the international search	Date of mailing of the international sea	irch report
_	2 Docombon 2002	10/12/2002	
	.2 December 2003	19/12/2003	
Name and i	mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2	Authorized officer	
	NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,	٠	D
	Fax: (+31-70) 340-3016	de La Morinerie, l	Ø

International Application No
PCT/US 03/18724

		PCI/05 03/18724
C.(Continua	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99/25677 A (LUBRIZOL ADIBIS HOLDINGS LTD; MORETON DAVID JOHN (GB)) 27 May 1999 (1999-05-27) cited in the application page 18; claim 14; example 1 page 24, paragraph 27	1,3,4,7, 9,10
X	WO 87/01126 A (LUBRIZOL CORP) 26 February 1987 (1987-02-26) page 17, line 20 - line 25	1,4
A	US 6 017 370 A (ZIEGLER KIM L ET AL) 25 January 2000 (2000-01-25) cited in the application the whole document	15,17-21
A	WO 99/61562 A (INFINEUM UK LTD; INFINEUM USA LP (US)) 2 December 1999 (1999-12-02) page 33, line 8 - line 16; claims 1-8,11,12,16-18 page 34, line 1 - line 12	1,2, 9-11,15, 17,21,22
Α	US 4 234 435 A (DAVIS KIRK E ET AL) 18 November 1980 (1980-11-18) cited in the application column 19, line 53 - line 63; example 40	4,5
Α	EP 0 678 568 A (BETZ EUROP INC) 25 October 1995 (1995-10-25) cited in the application the whole document	6
Α	EP 0 476 196 A (ETHYL PETROLEUM ADDITIVES LTD) 25 March 1992 (1992-03-25) page 4, line 8 - line 35 page 9, line 31 page 11, line 16 - line 17	1-25
A	WO 01/062874 A (LUBRIZOL CORP) 30 August 2001 (2001-08-30) cited in the application the whole document	15,17-20

ation on patent family members

PCT/US 03/18724

	<u> </u>		<u> </u>		03/16/24
Patent document cited in search report	4	ication ate	Patent family member(s)		Publication date
WO 9925793	A 27-	O5-1999 AT AL AL BE BE CA CN DE EF GE WO PL SK TE US ZA	73340 116419 10451 981415 230906 127885 6980200 102902 234615 992579 000473 200250608 2000247 34030 677200 2000122 627053 200100323	0 B2 9 A 8 A 1 A1 6 D1 6 A A1 6 A A1 6 T 1 A1 0 T2 7 B1 1 A1	15-10-2001 10-05-2001 07-06-1999 30-03-2001 27-11-2001 27-05-1999 03-01-2001 15-11-2001 23-08-2000 02-08-2000 27-05-1999 28-04-2001 26-02-2002 05-07-2000 29-01-2001 03-12-2001 03-12-2001 07-08-2001 14-06-2001 26-04-2000
WO 0179397	A 25-	-10-2001 AL C/ W(EF	240379 0 017939	3 A1 7 A2	30-10-2001 25-10-2001 25-10-2001 15-01-2003
US 5821202	A 13-	-10-1998 AU C/ DE EF	223583 6981575	5 A1 2 D1	05-11-1998 29-10-1998 31-07-2003 11-11-1998
WO 9925677	A 27-	-05-1999 Al DE DE EF W(JF	6981120 6981120 095451 992567 200150808	8 D1 8 T2 7 A1 7 A1 4 T	07-06-1999 13-03-2003 27-11-2003 10-11-1999 27-05-1999 19-06-2001 13-03-2001
WO 8701126	A 26-	-02-1987 US AT	469068 7782 11852 15406 59139 619298 60005 825308 860685 130385 8610681 365023 365023 365063 365063 365063 368587	7 A 8 T 8 T 8 T 8 B 2 A 8 B 2 A 0 C 7 A 9 D 1 C 7 D 1 C 7 D 1 C 7 D 1 T 2 T 3 T 7 T 3	21-04-1987 01-09-1987 15-07-1992 15-03-1995 15-06-1997 30-11-1989 10-03-1987 02-08-1990 31-03-1988 03-11-1987 23-06-1992 27-05-1987 23-03-1995 10-07-1997 15-01-1998 06-08-1992 29-07-1999 17-03-1988

nation on patent family members

International Application No
PCT/DS 03/18724

	tent document in search report		Publication date		Patent family member(s)		Publication date
MU	8701126		<u></u>	DK	66695	. A	12-06-1995
WO	0/01120	^		DK	192587		16-04-1987
				EP	0233250		26-08-1987
			•	EP	0423744		24-04-1991
				EP	0579339		19-01-1994
							01-06-1988
				ES	2001515		
				FI	871661		15-04-1987
				FI	871707		16-04-1987
				HK	36993		23-04-1993
	•			IL	79599		31-01-1991
				IN	167837		29-12-1990
				JP	7088514		27-09-1995
				JP	63500602		03-03-1988
				MX	164983		13-10-1992
				NO	871551		13-04-1987
				NO	952019		22-05-1995
				SG	15993	-	16-04-1993
				WO	8701126		26-02-1987
				US	4804389) A	14-02-1989
				ZA	8606177	' A	25-03-1987
US	6017370	Α	25-01-2000	EP	0989176	A1	29-03-2000
WO	9961562	Α	02-12-1999	AU	4143199) A	13-12-1999
				CA	2332868	• •	02-12-1999
				DE	69903545	·	21-11-2002
				DE	69903545		14-08-2003
				WO	9961562		02-12-1999
				EP	1088045		04-04-2001
				JP	2002516382		04-06-2002
				ÜS	6232277		15-05-2001
US	4234435	Α	18-11-1980	NONE			
EP	0678568	Α	25-10-1995	US	5621154	. A	15-04-1997
				AT	194379	T	15-07-2000
				AU	686321	. B2	05-02-1998
				AU	1635395		26-10-1995
				CA	2146958		20-10-1995
				DE	69517735		10-08-2000
				DĒ	69517735		01-03-2001
				EP	0678568		25-10-1995
				ES	2147594	· -	16-09-2000
				PT	678568		31-10-2000
				บร	5596130		21-01-1997
				US	5725611		10-03-1998
				BR	9510186		14-10-1997
				FI	972828		01-07-1997
				JP	10512310		24-11-1998
					972720		02-07-1997
				NO NZ			25-11-1998
				NZ	301909		
				PL	320942		24-11-1997
				TR WO	960797 9620990		21-10-1996 11-07-1996
ΕP	0476196	Α	25-03-1992	EP	0476196		25-03-1992
				ΛII	635158	: R7	11-03-1993
				AU AU	8465091		26-03-1992

ation on patent family members

PCT/US 03/18724

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0476196	Α		CA	2051452 A1	21-03-1992
			DE	69004692 D1	23-12-1993
			DE	69004692 T2	10-03-1994
			ES	2060058 T3	16-11-1994
			JP	4234489 A	24-08-1992
			US	5944858 A	31-08-1999
WO 0162874	A	30-08-2001	US	6610110 B1	26-08-2003
			AÜ	6654901 A	03-09-2001
			CA	2399882 A1	30-08-2001
			EP	1257620 A2	20-11-2002
			JP	2003524060 T	12-08-2003
			WO	0162874 A2	30-08-2001
			US	2002184814 A1	12-12-2002